

REMARKS

The non-final Office Action mailed March 8, 2007, was received and its contents carefully reviewed. Claims 1-5, 9-11, 13-39, 42, 43, 46-74, and 77-80 remain pending. Applicants respectfully request reconsideration of this application in light of the following remarks.

A. Claim Rejections Under 35 U.S.C. § 103

Claims 1-5, 9-11, 13-39, 42, 43, 46-74, and 77-80 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Boucher et al. WO 0051310 ("the Boucher reference") in view of Ficco U.S. Patent Application No. 20050166224 ("the Ficco application"). In view of the comments below, Applicants respectfully request reconsideration and withdrawal of these rejections under 35 U.S.C. § 103(a).

1. Rejection of Independent Claim 1 Under 35 U.S.C. § 103(a)

The present invention relates to a system and method of programming content to viewers via digital signals. Additional bandwidth for advertisements or other programming is leveraged by trading-off standard, full-motion, thirty frame-per-second video for combinations of still-frame video, high quality audio, and graphics. The system and method of the present invention provides content trade-offs for greater bandwidth utilization efficiency, thereby making a greater amount of differentiable programming content available.

For example, independent claim 1 recites a method of increasing a quantity of differentiable programming content available in a digital programming transmission stream comprising creating a plurality of digital programming components, where the plurality of digital programming components utilize a bandwidth of the digital programming transmission stream less than or equal to a bandwidth normally allocated for a standard digital programming segment. Claim 1 further recites that the standard digital programming segment is a unit of differentiable programming content. The method recited in claim 1 also includes defining a plurality of subsets of the plurality of digital programming components to include a plurality of component programming segments, where each component programming segment is also a unit of differentiable programming content. Further, claim 1 also recites inserting the plurality of component programming segments into the digital programming transmission stream, where the plurality of component programming segments

replace a standard digital programming segment in the digital programming transmission stream, and where, without increasing the bandwidth normally allocated for the standard digital programming segment, the quantity of differentiable programming content available in the digital programming transmission stream is increased.

Regarding independent claim 1, in the Office Action mailed March 8, 2007, the Examiner asserted that the Boucher reference discloses all the elements of claim 1, except for the steps of “[i]nserting the plurality of (component) programming segments into the digital programming transmission stream, wherein the plurality of (component) programming segments replace the standard digital programming segment in the digital programming transmission stream; wherein without increasing the bandwidth normally allocated for a standard digital programming segment, the quantity of differentiable programming content available in the digital programming transmission stream is increased.” See page 3, second full paragraph of the Office Action mailed March 8, 2007. The Examiner further asserted that the Ficco application discloses the inserting step, specifically at paragraphs [0071-0075] of the Ficco application. The Examiner concluded that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method taught in the Boucher reference with the features of the Ficco application “... to provide a cost effective scalable multimedia content targeted at specific end users.” See page 4, at the end of the first paragraph of the Office Action mailed March 8, 2007.

However, the Ficco application fails to disclose creating digital programming components that utilize a bandwidth of the digital programming transmission stream that is less than or equal to a bandwidth allocated for the standard digital programming segment as required by claim 1. Instead, the Ficco application discloses a technique of adapting an advertisement previously broadcast or in the process of being broadcast by selecting an ad from ads stored in memory. The Ficco application also discloses “that a further decision is made as to whether the selected ad should be further processed to further adapt the ad to the recipient.” See paragraph [0073] of the Ficco application.

While the Ficco application appears to discuss an advertisement adapting process, including the fill-in process, the Ficco application is concerned with the length of the advertisement, not the bandwidth as required by claim 1 of the present application. The Ficco application discloses that after the ad is processed, a decision is made in step 270 as to “whether the length of the adapted ad is less than the time slot assigned to the originally

broadcast ad.” See paragraph [0075] (emphasis added). If the length of the ad is less than the entire original broadcast advertisement, the Ficco application discloses a fill-in process performed in step 280 by selecting another advertisement or by repeating the adapted advertisement until the time slot is filled.” See paragraph [0075] (emphasis added).

Applicants respectfully submit that the Ficco application discloses an advertisement adapting process that is concerned with length of the ad segments, not bandwidth. Applicants respectfully submit that the Ficco application does not disclose or suggest replacing a standard digital programming segment with a plurality of digital programming components that, together, utilize a bandwidth less than or equal to the bandwidth normally allocated to the standard digital programming segment, wherein the replacement of the standard digital programming segment with the plurality of digital programming components is such that the quantity of differentiable programming contents is increased without increasing the allocated bandwidth, as recited in claim 1 of the present application.

Further, Applicants respectfully submit that the Ficco application teaches away from the present invention by its focus on length such that the bandwidth of the ad segment in the Ficco application could be increased when replacing a segment, not decreased. For example, if the original advertisement in the Ficco application was a low bandwidth, high resolution video segment with a length of 5 seconds, according to the Ficco application, this original advertisement could be replaced with a high bandwidth, high resolution video segment having a length of 4 seconds, since the length of the replacement ad is less than that of the original ad. That is, the low resolution, low bandwidth segment (lasting 5 seconds) would be replaced with a high resolution, high bandwidth segment (lasting 4 seconds). Further, Ficco discloses adding another one-second segment to fill the remaining 1 second gap left by removal of the first ad segment. See paragraph [0075] of the Ficco application. These replacement segments have a much higher bandwidth than the original segment.

As such, Applicants respectfully submit that the Ficco application fails to disclose or suggest inserting a plurality of component programming segments to replace a standard digital programming segment, without increasing the bandwidth normally allocated to the standard digital programming segment, as recited in claim 1 of the present application. On the contrary, as shown in the example above, the focus on the length of the ad segments in the fill-in process in Ficco results in an increase in the bandwidth required. Applicants respectfully submit that Ficco does not teach or suggest the inserting step of claim 1 wherein

the bandwidth allocated is not increased. Therefore the combination of the Boucher reference and the Ficco application fails to disclose or suggest all the features recited in independent claim 1 of the present application. Thereby, the combination of the Boucher reference and the Ficco application fails to render claim 1 obvious under 35 U.S.C. § 103(a). As such, Applicants respectfully request that the rejection of claim 1 under 35 U.S.C. § 103(a) be withdrawn.

2. Rejection of Independent Claims 2, 3, 4, and 77 Under 35 U.S.C. § 103(a)

Claims 2, 3, 4, and 77 are additional independent method claims that include inserting a plurality of component programming segments to replace a standard digital programming segment, without increasing the bandwidth normally allocated to the standard digital programming segment, as outlined above with regard to claim 1. As such, Applicants respectfully submit that the combination of the Boucher reference and the Ficco application fails to disclose or suggest all the features recited in independent claims 2, 3, 4, and 77 of the present application for the same reasons discussed above with regard to claim 1 of the present application. Thereby, the combination of the Boucher reference and the Ficco application fails to render claims 2, 3, 4, and 77 obvious under 35 U.S.C. § 103(a). As such, Applicants respectfully request that the rejection of claims 2, 3, 4, and 77 under 35 U.S.C. § 103(a) be withdrawn.

3. Rejection of Dependent Claims 5, 9-11, 13, 14-35, and 78-80 Under 35 U.S.C. § 103(a)

Claims 5, 9-11, 13, 14-35, and 78-80 depend directly or indirectly on one or more of claims 1, 2, 3, 4, or 77 and thereby include all the limitations of one or more independent claims 1, 2, 3, 4, or 77 while reciting additional features of the present invention. As such, Applicants respectfully submit that the combination of the Boucher reference and the Ficco application fails to disclose or suggest all the features recited in dependent claims 5, 9-11, 13, 14-35, and 78-80 of the present application for the same reasons discussed above with regard to claims 1, 2, 3, 4, and 77 of the present application. Therefore, the combination of the Boucher reference and the Ficco application fails to render claims 5, 9-11, 13, 14-35, and 78-80 obvious under 35 U.S.C. § 103(a). As such, Applicants respectfully request that the rejection of claims 5, 9-11, 13, 14-35, and 78-80 under 35 U.S.C. § 103(a) be withdrawn.

4. Rejection of Independent Claims 36-39 Under 35 U.S.C. § 103(a)

Claims 36-39 are claims directed to systems of the present invention that are used to carry out the methods of the present invention recited in independent claims 2-4. Independent system claims 36-39 are counterparts to independent method claims 2-4. Independent claims 36-39 include a transmitter that transmits a plurality of component programming segments to replace a standard digital programming segment, without increasing the bandwidth normally allocated to the standard digital programming segment, as outlined above with regard to claims 1 and claims 2-4. As such, Applicants respectfully submit that the combination of the Boucher reference and the Ficco application fails to disclose or suggest all the features recited in independent system claims 36-39 of the present application for the same reasons discussed above with regard to claim 1 and claims 2-4 of the present application. Therefore, the combination of the Boucher reference and the Ficco application fails to render claims 36-39 obvious under 35 U.S.C. § 103(a). As such, Applicants respectfully request that the rejection of claims 36-39 under 35 U.S.C. § 103(a) be withdrawn.

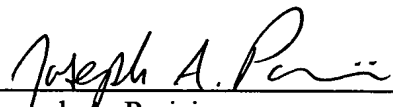
5. Rejection of Dependent Claims 42, 43, and 46-74 Under 35 U.S.C. § 103(a)

Claims 42, 43, and 46-74 depend directly or indirectly on one or more of system claims 36-39 and thereby include all the limitations of one or more independent claims 36-39 while reciting additional features of the present invention. As such, Applicants respectfully submit that the combination of the Boucher reference and the Ficco application fails to disclose or suggest all the features recited in dependent claims 42, 43, and 46-74 of the present application for the same reasons discussed above with regard to claims 36-39 of the present application. Therefore, the combination of the Boucher reference and the Ficco application fails to render claims 42, 43, and 46-74 obvious under 35 U.S.C. § 103(a). As such, Applicants respectfully request that the rejection of claims 42, 43, and 46-74 under 35 U.S.C. § 103(a) be withdrawn.

B. Conclusion

In view of the foregoing, Applicants respectfully submit that all the pending claims 1-5, 9-11, 13-39, 42, 43, 46-74, and 77-80 of the present application are in condition for allowance and respectfully request that the application be passed to issue. However, if any issue remains after considering this response, Applicants invite the Examiner to call the Applicants' undersigned representative to expedite prosecution and work out any such issue by telephone.

Respectfully submitted,



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